

**MARICOPA ASSOCIATION OF GOVERNMENTS
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LAND USE AND URBAN DEVELOPMENT
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PREFACE – TWO FUTURES

Picture two metropolitan regions of the United States in the not-so-distant future. Each once had the same resources — water, air, land and people — but a quick glance reveals that each took different paths at the start of the 21st Century.

In one region, the features that had once made it attractive are rapidly vanishing. The region's central core, which formerly prospered with an active downtown, strong manufacturing base and vibrant neighborhoods, is now experiencing disinvestment. Its residents, at least those who remain, are disproportionately poorer and older, and their neighborhoods are not being renewed with younger families and new or rehabilitated housing. The aging suburbs that circle the city have begun to experience similar patterns of disinvestment. However, the threat of blight and decline is even more ominous here, since these suburbs have fewer financial resources than the central city, due to a stagnant or nearly non-existent tax base and very few employment opportunities except modest wage service jobs. They are unable to cope with changed demands for services and the need to maintain streets, parks, sewers and the like.

The region's outlying suburbs are located in what was once a productive agricultural belt or Sonoran desert landscape, with small independent towns of distinct and diverse qualities. But the agricultural and desert land is quickly disappearing; the small towns have merged into a characterless blur on the region's landscape with faceless, homogeneous strip shopping centers, convenience food restaurants and automobile dealerships. The region has reached a point where every place looks like every other place. The residents who had moved to these areas complain that the very attributes that had first drawn them to their communities are fading. Commuting delays grow longer and longer, and no matter how many fixes are made to freeways, nothing helps to ease the congestion. Families and friends have less time to spend together, and citizens have limited opportunities to participate in community life.

Of course, a few communities in the outlying areas always seem to capture the prestigious office parks and regional shopping malls, and, consequently, they have lower property taxes and good public services. The rest, however, struggle to keep up with the demands of growth and financing shortfalls. Hoping to attract a large commercial or industrial development, they mortgage their future by offering tax incentives, utility hook-up waivers, low-cost or free land which they cannot afford to provide and zoning waivers that will destroy their landscape and community character. Service businesses in these outlying areas cannot entice employees because there is no affordable housing nearby and transportation from the central city and the inner-ring suburbs is infrequent, expensive and inconvenient. Schoolteachers and police officers in these communities complain that they cannot afford to live near

where they work. They face long, time-consuming trips by automobile across the region to reach their jobs.

The natural environment is not much better. The air has taken on a biting, stinging quality. Asthma is on the rise. Development has been permitted in areas that periodically flood. The desert open spaces that had once been so prominent in the region and provided refuge for birds, reptiles and rare plants are being filled and developed. There has been talk about purchasing these lands for an open space system, but the elected officials in the region worry about the costs of acquisition and long-term maintenance, and the loss of property taxes from denying development, so the idea is shelved.

In the second metropolitan region, there is a different story. The region's governments pride themselves on their willingness to cooperate with one another, plan for the general good and offer their citizens opportunities to participate collaboratively in civic life. The characteristics give the region an international reputation, and delegations from other states and even other countries regularly visit to learn from its successes. The planning for the region is animated by a strong set of commonly held values and a vision of where the region wants to be in 40 years.

The central city and the inner-ring suburbs work together to prevent the area from slipping into decline. They continue to be vibrant communities, with bustling, diverse neighborhoods. They experience cycles of renewal and rebirth involving housing for all income levels, retail businesses and start-up companies. Because the region's leaders had agreed some years before on a regional land use framework and sharing tax revenue on a metropolitan basis, businesses have located in or adjacent to activity centers where people can get to them easily, and no local government feels pressured to chase economic development simply for tax revenue, or to accept a business at a site that is not optimal or on terms that are not in the public interest.

This region has made every effort to link land use and transit. Mixed use activity centers combine middle- and high-density residential uses with employment and entertainment. Within neighborhoods, transit stations become focal points surrounded by neighborhood shopping and small office hubs. Transition of once declining neighborhoods and communities has come about because of reinvestment in the central city neighborhoods to improve parks, lower crime and increase transportation and mobility choice.

A mix of local (approved by voters) and federal government funding has enabled the region to develop a regional transportation system integrated with land use and economic development policies. The region's leaders had the foresight to opt for a multi-modal transportation system that offers people many alternatives to automobiles, rather than just one or two. Mass transit, many believed, could be quicker, cheaper and safer than automobiles. An increasing number of people now

leave their cars parked at home or at transit stations within their communities. The transportation system is now linked together, and it is possible to cross the region rapidly, moving from train to bus without significant delay. The environmental consequence of reduced auto travel is that the air has become cleaner and commute travel times have been reduced.

The region's leaders also initiated a long-range plan to purchase, in advance of development, environmentally significant parcels containing pristine Sonoran desert, drainage corridors and natural habitats. This series of greenways form a continuous recreational and open space link within the region. Bike paths have been constructed through and alongside the greenway system, and as a result, the greenways double as bicycle and pedestrian transportation corridors. Because the region has taken steps to direct development away from flood sensitive areas, its communities do not have to expend funds to clear up flood debris and repair public facilities.

Growth has been carefully planned in the region to avoid pristine desert lands, which benefit from a comprehensive open space and resource preservation program that relieves the pressure to develop them. The villages in the region's outskirts remain freestanding and retain their distinctive Southwest rural character.

The region's leaders have recognized an obligation to ensure that affordable housing is dispersed across the metropolitan area and are taking active measures to guarantee that an adequate supply is built and integrated into existing neighborhoods, as well as new master planned communities. Thus, teachers, police officers, bank and grocery clerks, waiters and waitresses and others with low- and moderate-wage jobs can live within reasonable distances of their employers.

Which is our future?

KEY FINDINGS AND ISSUES

- According to the Morrison Institute,¹ the Phoenix Metropolitan Area does practice a limited form of “smart growth” management. No regional or state-level regime exerts strong management across the urban area, but many local governments employ an array of growth management approaches. For example, large desert tracts are being protected as open space within and near the urbanized area, downtown cores are undergoing revitalization, infill development incentives are in place in many of the larger cities and financial exactions are offsetting portions of the costs to cities for new development.
- For the last 50 years, sprawl has been the dominant growth practice in the United States. In 1950, 84 million people lived in 168 U.S. metropolitan areas. Sixty percent (60%) of these lived within the “central city.” By 1990, the demographic proportions of these 168 metro areas were reversed, with only one-third of their population of 159 million living in central cities.
- The following are the indicators of sprawl in Phoenix Metropolitan Area. These indicators clearly suggests that there is a need to apply smart growth management tools in order to discourage sprawl:
 - Metropolitan Phoenix has a density of 4.2 people per acre or 2,707 people per square mile .¹
 - From 1975 to 1995, Metropolitan Phoenix’s urbanized area more than doubled. Forty percent (40%) of all agricultural land and 32% of undeveloped desert was lost.¹
 - From 1970 to 1990, the population of the Phoenix Urbanized Area increased by 118%, while the number of miles driven in the area (“vehicle miles of travel” or “VMT”) increased by 257%.
 - In the 1980s in Metropolitan Phoenix’s urban areas, the number of VMT increased three times faster than the population.
 - From 1995 to 2000, the urban edge has advanced nearly one-half mile per year, and three-fourths mile per year in the southeast. The region’s heaviest homebuilding is now occurring in a ring some 18 to 21 miles from downtown Phoenix.
- More and more, land development policy is written and talked about in the national news media. More people are aware of land use issues and want to get involved. The discussion of sprawl and growth is often divorced from reality.

Paradoxically, people hate both sprawl and density. The sprawl/density issue may ultimately be an issue of “place differentiation” and “place separation.” The perception is that everything looks the same and feels the same. When leaving one’s home, the view along the drive is less interesting and feels more urban. There needs to be a way to make density NOT a dirty word, and “place-making” is one method to make density acceptable. Neighborhood character and place-making are frequently overlooked at the community planning scale. We need both “sprawl” and “density” to accommodate expected growth. Sprawl alone will result in the decay of the urban core. Density increases alone cannot accommodate growth.

- Effecting regional change is a slow process that requires a long-range perspective and a long-term commitment, to make changes at three different scales: project scale, community or corridor scale and regional scale.
 - **Project Scale** changes to land use can happen every day as cities and counties review and approve development projects. To facilitate change, communities can start now to modify their codes and regulations to incorporate more aggressive standards into local land use decisions.
 - **Community or Corridor Scale** changes to land use typically require a longer planning horizon (5 to 15 years). As a number of cities in Maricopa County plan for Light Rail Transit (LRT), which will include a Phase One system opening in 2006, they are planning at the community or corridor scale. Station area planning evaluates development, redevelopment, infill and preservation improvement opportunities within a one-fourth to one-half-mile radius around station location. In studying neighborhood pockets around transit stops, cities may want to modify their land use plans to take advantage of increased pedestrian activity and promote transit usage.
 - **Regional Scale** changes to land use happen after extensive study and priority-setting by various communities with regard to: urban form options, integrating these land use approaches with other regional planning (e.g., transportation, open space, affordable housing, economic development), and sorting out the implementation requirements (e.g., regional planning legislation, tax revenue sharing) to achieve desired outcomes. These efforts often take three to four years to complete (in terms of study and consensus-building), and decades to implement among various jurisdictions and regional agencies.
- Compact urban form, with an emphasis on central city redevelopment, infill development and limited development on the fringe, will not work unless communities also address crime and security concerns, and the quality of schools and public facilities. It is important to maintain a strong middle-income family presence in inner-city neighborhoods and edge city suburban areas, and to attract

aging residents (e.g., empty nesters, retirees) back to the core as their lifestyle changes. Although compact urban form options (evaluated in the previous Maricopa Association of Governments [MAG] Urban Form Study) would not appreciably reduce traffic congestion or improve air quality, they would increase mobility choice, address affordable housing and community revitalization and improve overall quality of life with a variety of lifestyle choices in older urban areas and newly developing suburban areas. LRT in the Phoenix Metropolitan Area could help create higher urban density development and redevelopment along the rail transit routes, as well as within station influence areas. LRT offers potential for the revitalization of urban neighborhoods and the improvement of local and regional quality of life.

- While the recently enacted “Growing Smarter Plus” legislation gives cities and counties new tools to address sprawl, including urban service limits and the potential to implement impact fees for the cost of new development, it still lacks mandatory regional oversight and inter-city coordination. To improve Growing Smarter Plus, the legislation should be changed to require regional approval of local general plans, through some form of regional planning oversight agency. This agency should help local governments by providing leadership on matters such as air quality, transit and economic development (including revenue sharing) that cross jurisdictional boundaries. If planning is not better coordinated, we will continue to implement land use policy by accident.
- Entitled (already approved) development can accommodate over 500,000 new housing units, many of which are at the edge of the current urbanized area. Over 120,000 of these homes are in the City of Buckeye alone. The smaller rural communities experiencing phenomenal growth are not mature enough to adequately address growth issues. Many have only one planner and are struggling with “Growing Smarter Plus” and everyday development review pressures. They are not prepared to cope with the growth headed their way. These communities could benefit from regional leadership and initiatives to provide standardized code/ordinances that can help them address issues of infrastructure capacity, impact fees and design standards.
- Our infrastructure is becoming increasingly overburdened. Capacity problems worsen when the region expands while continuing to use much of the old trunk infrastructure to access water supply, wastewater treatment and major storm drainage facilities. The original infrastructure was sized for lower levels of population, density and growth. More emphasis needs to be placed on upgrading existing infrastructure and developing alternative solutions (e.g., use of tertiary treated effluent for landscape irrigation).
- Although the real estate market is probably not ready for pure New Urbanist or Transit Oriented Development, hybrid developments such as the DC Ranch and

Desert Ridge master planned communities contain a mix of traditional neighborhood character, good neighborhood planning, multi-modal circulation systems, extensive open space and interconnectedness that supports quality of life. They contain hybrid elements that can be accomplished and should be pursued elsewhere in both master planned communities and traditional neighborhoods. We expect to see an increasing number of hybrid development characteristics in such neighborhoods.

- Maricopa County's urban land area doubled between 1975 and 1995, when 40% of all agricultural land and 32% of undeveloped desert was lost. Maricopa County is rapidly losing desert and agricultural areas to urban uses. The City of Phoenix estimates that State Trust land encompasses 70% of the undeveloped land on its north side. Large tracts of such trust land near the urban fringe constitute an irreplaceable asset for the region's quality of life. This land could serve as a natural growth boundary that provides a vast reservoir of open space. The vivid Sonoran Desert is what makes Metropolitan Phoenix unique and gives it a special character, including its status as a major tourist destination. Losing huge tracts of desert threatens the region with the loss of its best and most distinctive environmental assets. Major open spaces should be preserved within and at the edge of the metropolitan area.¹

SMART GROWTH

- **National Findings:** "The seismic aftershocks of explosive growth have registered in the American hinterlands — in distant wilderness preserves, wildlife refuges and parks; in deserts, prairies, forests and mountain ranges; and in the agricultural communities and rural horizons that once defined the American experience. The vast American countryside, the fountainhead of national myth, memory and identity, is beginning to lose its distinctiveness."²
 - For many people, dissatisfaction goes beyond physical change in the landscape and the attendant costs. They are searching for roots, a sense of place, a sense of community. Their discontent may stem from economic uncertainties or reflect unease about the nature or pace of change generally. Their anxiety may be sparked by an influx of newcomers, incidents of street crime, traffic congestion or deteriorating schools. It must seem to some Americans that they have lost control of their communities. Many undoubtedly yearn to recapture from the past a seemingly simpler time, with tranquil suburbs or thriving, friendly urban neighborhoods.²
 - "The nation need not be locked into the rising costs of extending public facilities or providing disaster relief because of inefficient land use patterns that do not respect natural forces, especially the flow of water. Rather than treating

land as an afterthought incidental to the quality of life, Americans should recognize that land stewardship — promoting rational decision-making about the efficient use of land — is central to realizing their desires for a strong economy, a healthy environment and livable cities. This concern cuts across political lines, uniting all Americans who care about the future of their country.”²

- “Smart growth” seeks to accommodate population increases in ways that preserve the integrity of the community, protect the environment and enhance economic vitality. The goal of smart growth is not “No Growth” or even “Slow Growth.” Rather, the goal is sensible growth that balances the need for jobs and economic development with the desire to save our natural environment and quality of life.
- Two scenarios described in the preface contrast environments in contemporary American life. In the first, the set of problems facing the metropolitan region is exacerbated by the local governments’ inability to work toward shared goals and the lack of coordinated planning. In the second, while local governments maintain their independence, they cooperate with each other on matters of multi-jurisdictional importance, and the region’s leadership is able to employ advance planning to systematically address the management of growth and change.
- Smart Growth principles Include:
 - Anticipating Growth and Planning Needs,
 - Establishing a Long-term Comprehensive Plan with Adequate Land Supply,
 - Compact Development,
 - Protection of Natural Resources,
 - Substantial Public Open Space,
 - Infill Development,
 - Variety of Housing,
 - Mixed Use, Walkable Neighborhoods,
 - Balanced Multimodal Transportation,
 - Timely Provision and Fair Funding of Infrastructure,
 - Reasonable, Predictable Plan Review,

- Supporting Fiscal Policies, and
 - Integration of Land Use, Transportation, Infrastructure and Public Facilities in all Planning Decisions.
- Portland, Oregon; Atlanta, Georgia; and Lincoln, Nebraska, use Smart Growth principles to achieve quality of life, environmental and economic objectives in their metropolitan areas. Rancho Santa Margarita, California, a recent master planned community, has incorporated many of the important characteristics of smart growth: namely, a mix of land uses, open space preservation and various transportation options, resulting in a unique urban/suburban hybrid.
- Smart Growth planning has produced techniques that include the following:
 - Establishment of an urban growth boundary to limit or slow sprawl and retain valued resource and open space areas,
 - Clustering intense growth in areas near light rail stations and other mass transit facilities,
 - Redevelopment of the downtown to give the region a coherent focus,
 - An emphasis on infill construction in areas that are already developed and served by existing infrastructure, and
 - Using design guidelines that emphasize new urbanism and pedestrian-scale communities rather than automobile-based sprawl.³
- **Regional Findings:** According to the Morrison Institute,¹ the Phoenix Metropolitan Area does practice a limited form of growth management. No regional or state-level regime exerts strong management across the urban area, but many local governments employ an array of growth management approaches. For example, large tracts of desert are being protected as open space in and near the urbanized area, downtown cores are undergoing revitalization, infill development incentives are in place in many of the larger cities and financial exactions are offsetting portions of the costs to cities for new development.
- Twenty-five cities and towns in the metropolitan area and Maricopa County were surveyed by the Morrison Institute to better understand the nature and level of local growth management efforts. The county and 18 cities/agencies responded that they use the following approaches to growth management:
 - Strategies to discourage sprawl and encourage compact urban development, infill and revitalization of blighted or troubled areas (7 of 19 respondents).

- Requiring all infrastructure to be financially secured at the time of development by impact fees or adequate public facilities ordinances (15 of 19).
 - Urban design requirements that aim at aesthetically pleasing urban areas, mixed uses and environmentally friendly places (14 of 19).
 - Policies and programs to protect sensitive lands, rural areas and open space (8 of 19 respondents provide revenue for open space).
 - Policies and programs to assure affordable housing as a major component of new development.
- Eighteen less populous cities on the urban fringe now control nearly as much land as the City of Phoenix and the five largest suburbs combined. These urban fringe communities lag behind the rest of the region in open space protection and the use of growth management tools. However, East Valley fringe towns and cities wield more restrictive growth management tools than their counterparts in the West Valley. In the east, Apache Junction, Queen Creek, Mesa and Chandler use an average of five growth management tools. In the west, Glendale, Goodyear, Litchfield Park, Surprise and Peoria use an average of two tools. The municipalities in the region least equipped to deal with the effects of fast growth will soon be making decisions with enormous implications for the entire region. The challenge will be to bring a regional perspective to the planning efforts of all cities, while respecting the region's tradition of local control.¹
- During the last five years, the urban edge has advanced nearly one-half mile per year. In the southeast, the fringe moved out an average of three-fourths of a mile each year. The region's heaviest home building is now occurring in a ring 18 to 21 miles from downtown Phoenix. How far out will the ring of development need to be pushed to accommodate the 1.6 million additional residents projected for the region by 2020?
- Growing Smarter Plus legislation only brings Arizona up to the 20th Century in land use and growth management, by mandating elements that have been required by other states for more than a decade. While Growing Smarter Plus gives cities and counties expanded tools to control sprawl, including urban service limits and the potential to implement impact fees for costs of new development, it lacks mandatory regional oversight and inter-city coordination that other successful growth management programs employ. Reforms to the local planning processes, including public involvement plans and limits on annexations, are positive additions. However, the requirement for voter ratification of general plans and plan amendments could change a technically crafted document to a public relations piece.

SUSTAINABLE USE OF LAND/SUSTAINABLE DEVELOPMENT

- **National Findings:** The complex problems shared by cities throughout the United States are evidence of the impacts of urban sprawl — increasing traffic congestion and commute times, air pollution, inefficient energy use, habitat loss, inequitable distribution of economic resources and the loss of a sense of community.
 - Community sustainability requires a transition from poorly managed sprawl to land use planning practices that create and maintain efficient infrastructure, ensure close-knit neighborhoods and preserve natural systems.
 - Sustainable development provides a framework within which communities can use resources efficiently, create efficient infrastructure, protect and enhance quality of life and create new businesses to strengthen their economies. Sustainable development is a strategy by which communities seek economic development approaches that also benefit the local environment and quality of life.⁴
- The way we plan the physical layout, or land use, of our communities is fundamental to sustainability. Two main features of our land use practices over the past several decades have converged to generate haphazard, inefficient and unsustainable urban sprawl:
 - Zoning ordinances that isolate employment, shopping and services and housing from each other, and
 - Low density growth planning aimed at creating automobile access to increasing expanses of land.⁴
- Communities practicing sustainable development include: Albuquerque, New Mexico; Chillicothe, Missouri; Hidden Springs, Idaho; and Seaside, Florida. A primary objective of Albuquerque's plan is to help create a sustainable future for the community and develop a sense of social and environmental stewardship.
 - Hidden Springs, Idaho, sustainable planning is based upon eight principles that aim to protect the natural environment, preserve rural character and farming traditions, preserve quality of life, increase diversity and achieve traditional design for neighborhoods and homes.
- **Regional Findings:** Native Americans in the Valley of the Sun learned sustainability through centuries of survival. As European settlers moved in, the balance of sustainability was continually altered with urban conveniences (e.g., electricity, irrigation, railroads, wood-built structures, highways, shopping centers and airports). Sustainable living was lost, and the balance was eliminated between

the area's finite and delicate resources and the desire to change the living environment to suit the new population.

- In an Arizona State University (ASU) study of sustainable development (funded by the Environmental Protection Agency),⁴ ASU found that 9,000 acres of land per year — *one acre per hour* — have been developed, resulting in loss of habitat, damage to riparian areas and communities with low levels of social well-being. The communities in the Phoenix Metropolitan Area are automobile-dependent, and houses are designed without regard to energy demand or use of environmentally responsible materials. Serious air quality problems have been attributed to sprawl and the rapid increase in vehicle miles of travel. While many communities have worked toward identifying principles of sustainable development, few have attempted to apply these principles to the design of a specific site.
- Civano, a master planned community under development on the eastern fringe of Tucson, is attempting to return to more traditional building and living practices. Civano is an environmentally and pedestrian-friendly community dedicated to a lifestyle that fosters relationships among the social community, the environment and natural resources. Civano's name comes from a Native American word referring to sustainability.
 - The Civano community encompasses 1,145 acres and plans to build 2,600 homes in four neighborhoods combining places to live, work, learn, shop and play. Civano is a community that connects people to the environment while re-creating the kind of social action that was once a part of everyday life before privacy and cars became prominent. The Civano community puts the idea of socialization at the top and creates a framework where people feel that they belong. The Neighborhood Center, a microcosm of the community, has a group of public buildings and businesses designed to represent the technology of the entire community. As a demonstration of sustainable building techniques, offices, a café, an art gallery, retail stores and a meeting hall are made of straw bale, RASTRA block (cement-coated recycled polyurethane foam blocks), wood frames, recycled materials, passive and active solar designs, thermal mass walls and energy-efficient windows with recycled wood frames and environmentally friendly glue.
 - Goals of Civano are to significantly reduce water use, air pollution and solid waste, and to conserve energy with promotion of passive and active solar methods, as well as to provide affordable housing and good jobs. The goal of this development is to construct a new form of community that balances human needs with natural resources.

- Phase One of Civano has attracted a diverse group of people of all ages and races. Residents have moved into more than 60 homes. The straw bale homes are admired by visitors but are difficult to mass-produce at a reasonable price. Most of the homebuyers therefore choose wood and steel frame construction. All the homes have designs that use optimal natural lighting and open spaces while promoting homeowner privacy.

HYBRID DEVELOPMENT

- **National Findings:** What is the future of suburban development? Reid Ewing⁵ predicts that much suburban development over the next two decades will be a modified version of New Urbanist principles. Many new developments will incorporate enough New Urbanist design elements to alter the suburban landscape. Does the housing market break down into just two large groups: New Urbanist (neotraditional) and conventional? Some experts feel that market segmentation is far more complex, with multiple development models and various hybrids potentially appealing to different niches. Hybridization of land development — the mix and match of “green,” conventional suburban, and neotraditional characteristics within a development — is being implemented in the United States at four levels: communities, commercial centers, individual streets/neighborhoods and individual design elements.
- In large master planned communities, hybridization occurs when one or more neotraditional neighborhoods are developed alongside conventional ones. The Woodlands outside Houston (a 1970s new town), whose older neighborhoods are completely conventional, recently opened its first neotraditional neighborhood. Lake Nona, a golf course community in Orlando, has made a wholesale switch from conventional development to a brand of neotraditional development in its later phases.⁵
- Old shopping centers from Winter Park, Florida, to Lafayette, California, are being razed and replaced with pedestrian-oriented shopping streets. Some new shopping centers are being designed with two sides, one auto-oriented and one for pedestrians. Even discount and power centers are being redesigned at a human scale.⁵
- At the neighborhood level, some conventional suburbs are incorporating traditional elements such as porches and public spaces. These changes reflect progress toward New Urbanism principles. Interestingly, there is movement in the opposite direction as well. Some New Urbanist developments are incorporating conventional design elements, such as cul-de-sacs or garages in front rather than off the back alley.

- Individual design elements also offer opportunities for hybrids. Instead of mixing land uses and housing types at the block level, as in neotraditional towns, or rigidly separating them, as in conventional suburbs, New Urbanist developers are building small homogeneous clusters next to each other. Different housing types back up to each other across alleys or occupy adjacent blocks. Likewise, small commercial centers may substitute for corner stores that were a feature of the first generation of New Urbanist developments. While the single structures blended beautifully with townhouses and cottage homes, their scale worked against them. They could not compete with the shopping centers down the road. Village and town centers, however, are holding their own.
 - Many other design elements are being hybridized as well. Street patterns are typical examples of how hybridization is implemented in neighborhoods. Instead of numerous street connections associated with traditional urban grids or, conversely, the few connections associated with curved suburban streets, many New Urbanist developments are now adopting hybrid street networks that minimize through traffic and improve connectivity. These new street patterns offer multiple routes to disperse traffic, shorten trips and facilitate access by emergency and service vehicles. An early example of neotraditional development is Laguna West (outside Sacramento), with its combined grid and cul-de-sac street network connecting to the town center. The street networks of Hidden Springs, Idaho, and Rivendell outside Sarasota, Florida, represent variations on this theme.
- **Regional Findings:** Kierland Commons and Desert Ridge contain elements of new urbanism that serve as examples of community and commercial center hybridization.
- With its pedestrian-friendly “main street” ambiance, open outdoor public spaces and a mix of upscale retail shops, restaurants and office space, Kierland Commons in northeast Phoenix leads a growing national trend in retailing. While “lifestyle centers” and big box power malls continue to proliferate, a new wave of urban village developments across the country is giving shoppers the best of all worlds: the convenience of an enclosed mall, a human-scale office environment and a somewhat nostalgic urban shopping experience.
 - Desert Ridge encompasses approximately 5,800 acres and is bounded by Pinnacle Peak Road, the Central Arizona Project Canal, 64th Street and 32nd Street. Desert Ridge provides a strong mix use of residential, commercial and employment uses, along with an extensive pedestrian-friendly street network in a master planned setting that respects the natural drainage system. Desert Ridge is located adjacent to the Loop 101 freeway corridor and will contain a Village Core, which will include development of a mid- to high-density mixed

use core with a variety of commercial, employment, medical, entertainment, public and residential uses. The 110-acre Desert Ridge Market Place, the 950-room Marriott Resort (with 18-hole golf course), and 90+ acre American Express regional corporate office campus are currently under construction. These will complement the Mayo Hospital and Sumitomo microchip manufacturing plant. Desert Ridge will be one of the first master planned communities in the Phoenix area to develop a strong employment core, resulting in a relatively high jobs/housing ratio by 2020. The pedestrian system in Desert Ridge uses a naturally reconstructed wash corridor network, with extensive plant salvage and reuse, to provide linkages from all neighborhoods to the town center.

LAND USE AND TRANSPORTATION CONNECTIONS

- **National Findings:** In 1940, 15% of the population of the United States lived in suburbs, 32% in center cities and 52% in rural areas. By 1990, these percentages had drastically changed, with 47% in suburbs, 32% in center cities and 21% in rural areas. Suburb-to-suburb commuting in metropolitan areas accounted for approximately 15% of work trips in 1970 and 44% in 1990. It is getting harder to serve work trips with conventional transit because of multiple origins and destinations.
- A national research project conducted for the Transit Cooperative Research Program expands and updates our knowledge of the effects of urban density on Light Rail Transit (LRT). This project analyzed information on 261 stations on 19 light rail lines in 11 cities, including Baltimore, Cleveland and St. Louis. The study shows that light rail, with its closely spaced stations, attracts more riders per station when it is located in denser residential areas. Feeder bus service also helps to boost light rail ridership.
- The San Diego Trolley is seen as one of the most successful light rails systems in North America and a prototype for other cities. From an average daily ridership of 11,000 in the first year, the initial 15.9-mile South Line increased its ridership to more than 20,000 a day in less than five years.
- Portland's success in devising and implementing strategies for land use and transportation planning have reversed the city's downtown decline, to make the city center a vibrant, growing and prospering core of the metropolitan area. Portland has achieved this through a commitment to transit, a willingness to innovate, a dedication to integrating land use and transportation planning and a participatory planning process that involves planners, political leaders and the public. In 1969, Portland's transit ridership was less than 18 million per year. By 1991, ridership had more than tripled to almost 58 million.

- The most successful examples of transportation planning occur when land use and transportation decision-making are meshed. Transportation planning must be tied to regional growth and land use decisions, and must support economic development.
- **Regional Findings:** The region faces complex transportation and land use decisions. Regional growth management is not capable of producing rapid change. If the most desirable land use and transportation plans were ready to implement tomorrow, we would not see significant changes in the urban form for at least a generation (20 or more years), because currently entitled development will accommodate more than a decade's worth of growth.
- On October 1, 2000, the *Arizona Republic* published a special report on growth management issues and two upcoming ballot measures. A map in the article highlighted almost 60 large-scale planned unit development projects in the Phoenix Metropolitan Area. These approved projects, when built out, will add over 500,000 units to the region's housing stock. Many of these projects are in cities at the edge of the current urbanized area, such as Buckeye.
- The 500,000 units mentioned above represent approximately a 15-year supply of housing. Thus, effecting regional change will require a long-range perspective and a long-term commitment.
- Why should we start changing land use and transportation now if we will see no significant difference for three decades or more? Actions initiated early allow for a better course and avoidance of future calamity. We can start now to affect urban form and land use on three different scales: project scale, community or corridor scale and regional scale.
 - **Project scale** changes to land use can happen every day as cities and counties review and approve development projects. To facilitate change, communities can start now to modify their codes and regulations to incorporate more aggressive standards into local land use decisions. Code modification should include change to development standards for (1) residential streets so that they support neighborhood circulator transit, and (2) commercial areas so that they support increased transit use. Local project-scale actions that can contribute to overall urban form changes include: encouraging mixed use developments and the establishment of mid- and high-density activity centers, reducing parking supply requirements, placing commercial building entrances along the street edge near transit, and making streets comfortable for walking. The latter can be accomplished by using parking and bike lanes to buffer pedestrians from traffic, and also by adding shade and pedestrian amenities. These principles can be applied to new development and also to infill and redevelopment opportunities. The consistent use of transit-friendly land use

principles during development review and approval will contribute to more responsible and efficient use of the land available for development or redevelopment.

- **Community or corridor scale** changes to land use typically require a longer planning horizon (5 to 15 years). As Phoenix, Tempe and Mesa develop the Central Phoenix/East Valley LRT line, of which Phase One will open in 2006, they are planning at the community or corridor scale. The LRT project includes evaluation of land uses surrounding station areas. Station area planning evaluates development, redevelopment, infill, and preservation opportunities for a one-fourth-mile to one-half-mile radius around each station. Cities may choose to modify their land use plans to take advantage of increased pedestrian activity and promote transit use near stations. Modifying land use plans to support LRT facilitates achievable short-term changes, which may be incorporated into the community's General Plan updates (that are mandated by 2002).
- **Regional scale** changes to land use require studying and prioritizing various community or urban form options, integrating these land use approaches with other regional planning (e.g., transportation, open space, affordable housing, economic development), and then sorting out the implementation requirements to achieve the actions (e.g., regional planning legislation, tax revenue sharing). These efforts often take three to four years to complete (in terms of study and consensus-building), and decades to implement through cooperation between various jurisdictions and regional agencies.
- Ten years ago, MAG initiated a study to examine how the Valley's urban form could be shaped regionally to function as a positive and productive economic and social unit. The MAG Urban Form Study identified three considerations regarding the shaping of urban form in the Valley.
 - First, communities can work toward many significant improvements for shaping the region, including higher densities at the core and in targeted activity centers, implementation of a multimodal transportation system that provides mobility choices and establishment of regional revenue sharing to reduce the "fiscalization" of land use. However, entitled development will account for any near-term growth, preventing rapid change.
 - Second, a compact urban form, with emphasis on central city redevelopment, infill development and limited development on the fringe, will not work unless the communities address crime and security concerns, as well as the quality of schools and public facilities in the inner city.

- Third, the study found that although the more compact urban form options do not appreciably reduce traffic congestion or improve air quality, they increase mobility choice, stimulate affordable housing and community revitalization, and improve quality of life with a variety of lifestyle choices, both in the older revitalizing urban areas and in newly developing suburban areas.
- In contrast to what has happened in other regions, Metro Phoenix's grid network and the lack of highway building in the 1960s to 1980s actually supported the region's central area. The present round of suburb-to-suburb freeway extensions is making jobs and homes away from the regional center more accessible, however. Thus, these freeways will intensify land consumption on the fringe. A key question for Metropolitan Phoenix is: should employment remain concentrated in the core while home building continues to move outward? Has the addition of other employment centers in Scottsdale, Mesa and Chandler improved the connection of housing and transportation? Are the freeways providing adequate suburb-to-suburb connections? The challenge will be finding transportation and land use initiatives that create dispersed, mixed use clusters of greater residential and employment density that do not detract from the vitality of downtown Phoenix, the Central Avenue office core and the airport employment area.
- "Transit village" is a new paradigm for creating attractive and sustainable communities, both in the city and the suburbs, where rail or other high-capacity transit systems are or will be in place. America's transit village movement is in many ways a reaction to the perceived declining quality of life in cities and suburbs. The transit village concept brings together ideas from urban design, transportation and economics. It is about creating a built form that encourages people to ride transit more often. The transit village is an organizing principle for creating built, social and economic environments that embrace and evolve around mass transit systems. Traffic jams, faceless sprawl, and disconnected land uses are among the many reasons more Americans are embracing the transit village concept. The most important physical elements of the transit village include civic plazas near stations, pleasant walking environs, a mix of land uses, diversity in housing and compactness. Pleasant Hill, Hayward, and Mountain View are emerging transit villages in the San Francisco Bay Area. Ballston and Rosslyn, Virginia, and Bethesda, Maryland, are emerging transit villages in the Washington, DC, area. Orenco Station is a completely new transit village developed on a greenfield site on the Portland Westside LRT line near the City of Hillsboro.⁶
- The planned LRT program is actually a comprehensive approach to improving mass transit that includes bus rapid transit (BRT), improved line-haul bus services on arterial roadways and feeder bus and neighborhood shuttles supporting rail

transit. Such a system is intended to encourage urban density along the rail corridor. LRT in the Phoenix Metropolitan Area could help create higher-density development and redevelopment along the rail transit routes and near stations, providing the first real planned connections between land use and transportation in the region. LRT's real success may be in its ability to economically revitalize city neighborhoods and improve quality of life in a way that would not be accomplished with land use changes alone.

DESERT PRESERVATION

- **Regional Findings:** Maricopa County's urban land area doubled between 1975 and 1995. Forty percent (40%) of all agricultural land and 32% of undeveloped desert was lost.¹
 - Maricopa County is rapidly losing desert and agricultural areas to urban uses. The vivid Sonoran Desert is what makes Metropolitan Phoenix unique and creates its appeal as a major tourist destination. Losing huge tracts of land threatens the region with the loss of its best and most distinctive environmental asset.
 - State and federal lands are also affecting Metropolitan Phoenix's open space and desert landscape. The City of Phoenix estimates that State Trust land encompasses 70% of the undeveloped land on its north side. Large tracts of State-owned trust land near the urban fringe constitute an irreplaceable asset for the region's quality of life. This land could serve as a natural growth boundary that provides a vast reservoir of open space. However, the state constitution requires that these lands be managed to maximize revenues for Arizona's educational needs. The mandate bars wholesale conservation of the lands and increase the likelihood of future land sales to developers. The challenge for the region will be to finance the purchase of prime open space lands, or to amend the Arizona constitution and state Enabling Act to allow for trust land to be dedicated to open space while maintaining the ability to fund schools. The region already provides some examples of cooperatively planned desert open space preservation.
 - In 1992, MAG, in conjunction with the Maricopa Department of Transportation (MCDOT) and the Flood Control District of Maricopa County (FCDMC), prepared the "Desert Spaces Plan" to serve as a guide for the protection of open space while allowing for future community growth and development. The MAG Regional Council adopted the Plan in 1995, with a recognition that Valley residents are quickly losing Sonoran vegetation, mountain access and views and riparian areas that define the character of the Valley and are important to the desert lifestyle. The Desert Spaces Plan is

intended to preserve, protect and enhance the mountains, foothills, rivers, washes, canals, cultural sites, upland desert vegetation and wildlife habitat of the area. The plan assesses existing conditions and presents a future vision that stresses the importance of timely and thorough coordination among local municipalities, public agencies, interest groups and residents.

- The Sonoran Desert Preservation and Comprehensive Land Use Plan, prepared by Pima County in the Tucson Metropolitan Area, represents a new and dynamic vision for accommodating population expansion and economic growth, while preserving and protecting regional natural resources. It provides the foundation for developing growth management plans. The Sonoran Desert Conservation Plan combines short-term actions to protect and enhance the natural environment with long-range planning to ensure that the natural and urban environments not only coexist, but also develop an interdependent relationship where one enhances the other. Implementing this plan will require continuous cooperation between governments, interest groups and citizens over the next 20 years. The action plan will also guide already approved public bond investment and conservation/preservation actions, establish federal program and funding priorities, and formalize the Tucson region's preference for the expenditure of state funds to preserve and protect State Trust lands threatened by urbanization. The Sonoran Desert Conservation Plan contains the following six elements: (1) ranch conservation, (2) historic and cultural preservation, (3) riparian restoration, (4) mountain parks, (5) habitat, biological and ecological corridor conservation, and (6) critical and sensitive habitat preservation.

PLANNING AND LAND USE REFORM

- **National Findings:** The effort to offer legislative solutions to manage growth and change is not new. In the 1920s, as American urban areas underwent a surge of growth, urban experts and federal officials focused their attention on creating enabling legislation for planning and land use controls. It was believed that, if urban areas had the proper grant of power from their state legislatures, they could create tools to grapple with the social and environmental stresses that afflicted the growing cities. The realization that new powers were needed to cope with growth and change did not occur overnight. States and local governments had been experimenting with various types of planning legislation since 1910.⁷
- When the early enabling legislation was drafted, growth was largely confined to central cities and the few suburbs that had commuter rail or streetcar lines. While control of air and water pollution, noise and industrial hazards was always a factor in urban areas and prompted the adoption of many early land use regulations, appreciation of the complex interactions of ecological

systems — and the human impact on those systems — was still in its infancy. After World War II, the vast changes in the shape and complexity of metropolitan areas tested the planning and zoning structure that enabling legislation provided. Prior to the automotive era, development had spread out along public transit lines that brought workers into the central areas during the day. With the advent of the automotive era, development began to fill in vast open spaces between these transportation spokes. Growth shifted outward from the central city to rural areas in ways that would have profound effects on the form and function of cities and towns. The political and social climate of the period supported financial incentives for building homes in the suburbs (through federally insured low-cost mortgages) and a massive federally subsidized expansion of highways that included the interstate highway system. Together they helped push development far beyond the nation's central cities.

- At first, Americans tended to fantasize about an idyllic existence in these newly developed suburban communities. The new communities had unquestionable attractions — large yards, garages, new schools, safe streets and a frontier-like sense of promise. Relatively few people seriously challenged this new pattern of growth in the outlying areas or questioned the changes in the central cities wrought by “urban renewal” and the replacement of older urban neighborhoods with multi-lane freeways. While a few cities responded by experimenting with metropolitan or regional forms of government, in most metropolitan areas such ideas got a cool reception.
 - In metropolitan areas with characteristics similar to the one described in the first scenario at the beginning of this paper — and there are many of them — there is a growing appreciation that something is wrong with the way things have turned out. Some persist in believing that the solution to the problems of metropolitan growth, decline and change is to continue to expand outward to the next tier of open land, striving to remain one jump ahead. But more and more people are acknowledging the social, economic and environmental costs of pushing ever outward, and the need for more effective planning to respond to changing needs of a region's population. They are asking whether there are better, more action-oriented planning models that are attuned to the realities of today and tomorrow.
- Current planning approaches to enabling legislation in the Phoenix Metropolitan Area are incapable of meeting the challenges of the 21st Century. The American Planning Association cites four reasons for this deficiency:
- **A more significant intergovernmental dimension for planning.** The Phoenix Metropolitan Area used to have a simpler government structure with fewer governmental units. Planning was a local activity, not something that was expected of all levels of government. Indeed, the role of the federal and state

government in shaping our urban and rural areas was non-existent. Beginning in the 1950s, the federal government created programs addressing transportation, the environment and other areas that had statewide or regional significance. Increasingly, the federal government placed greater responsibility on state and local governments for making transportation, environmental and other planning decisions when federal monies were involved.

- **A shifting view of land.** People in Arizona are beginning to believe that land is more than a commercial commodity. The land is now regarded as a resource. Vacant, developable land is recognized as having competing social values. It can be used for the construction of affordable housing or for the continuation of agriculture. How we develop our land — at what density or intensity — will have consequences for the form and relative compactness of metropolitan areas, which in turn will affect how much we have to travel and the consequences for the air we breathe.
- **A more active citizenry.** Until recently with Growing Smarter Plus, planning statutes were silent on the tools and techniques of participation in Arizona. Citizens now expect to be engaged in community planning processes, and, when they participate, they expect to see results from their efforts. The existence of the Internet, on which plans and information about developments can be placed as part of a government's home page, opens new options for citizen involvement.
- **A more challenging legal environment.** Land use controls are being employed to solve or prevent environmental problems, maintain open space and exact fees for public facility improvements (e.g., schools, water and sewer systems, roads, libraries, fire and police stations). The line between protecting the public from nuisances — the focus of early enabling legislation — and securing public benefits has blurred. In response, courts have begun to require government to compensate landowners for regulations that result in either a permanent or temporary taking of private property, that push the envelope "too far" in protecting the public health, safety and welfare — the traditional police power objectives of land use controls. Thus, the planning basis for our development decisions becomes even more significant as the justification for the regulatory and public expenditure systems it supports.

ABBREVIATIONS

ASU	Arizona State University
BRT	Bus Rapid Transit
FCDMC	Flood Control District of Maricopa County
LRT	Light Rail Transit
MAG	Maricopa Association of Governments
MCDOT	Maricopa County Department of Transportation
VMT	Vehicle Miles of Travel

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